



**PATENT**  
Attorney Docket No. A-67465/RFT  
Dorsey File No. 463037-168

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

*In re* application of:

KAYYEM

Serial No.: 09/295,691

Filing Date: April 21, 1999

For: *The Use of Microfluidic Systems in the  
Electrochemical Detection of Target  
Analytes*

Examiner: Starsiak, John S.

Art Unit: 1753

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT  
AND  
STATEMENT OF RELATEDNESS**

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In satisfaction of the duty of disclosure under 37 C.F.R. § 1.56, and in accordance with the provisions of 37 C.F.R. §§ 1.97 and 1.98, Applicants wish to draw the attention of the U.S. Patent and Trademark Office to the reference cited on the accompanying substitute for form PTO-1449. Copies of the references are enclosed herewith.

With respect to patent applications, the applicants point out their duty under M.P.E.P. §2001.06(b) to disclose relevant patent applications of which they are aware. To this end, the applicants draw the Examiner's attention to the following patent applications:

12/05/2003 HLE333 00000031 09295691

02 FC:1806

180.00 OP

Serial No.: 09/295,691  
Filing Date: April 21, 1999

1. U.S.S.N. 09/440,371, filed November 12, 1999;
2. U.S.S.N. 08/873,978, filed June 12, 1997;
3. U.S.S.N. 08/873,597, filed June 12, 1997;
4. U.S.S.N. 09/096,593, filed June 12, 1998;
5. U.S.S.N. 09/135,183, filed August 17, 1998;
6. U.S.S.N. 09/238,351, filed January 27, 1999;
7. U.S.S.N. 09/245,105, filed January 27, 1999;
8. U.S.S.N. 09/452,277, filed December 3, 1999;
9. U.S.S.N. 09/472,657, filed December 27, 1999;
10. U.S.S.N. 09/520,477, filed March 8, 2000;
11. U.S.S.N. 09/712,792, filed November 13, 2000;
12. U.S.S.N. 09/760,384, filed January 11, 2001;
13. U.S.S.N. 09/993,342, filed November 5, 2001; and
14. U.S.S.N. 10/412,660, filed April 11, 2003.

None of the foregoing references is believed to disclose the invention as claimed.

Nothing herein shall constitute an admission concerning the contents of any of the cited references, nor shall the inclusion of a reference herein be considered an admission that the reference constitutes prior art against the invention claimed in the above-identified application. Submission of the present document shall not be construed as an admission that a search has been made or that better art does not exist.

Pursuant to 37 C.F.R. §1.97(c), enclosed is a check in the amount of \$180.00 as set forth in 37 C.F.R. §1.17(p). While no further fee is believed to be due, if this belief is in error, the

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Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-2319 (Our Order No. 463037-168 (A-67465/RFT)).

Please direct any calls in connection with this application to the undersigned at  
(415) 544-7025.

Respectfully submitted,  
DORSEY & WHITNEY LLP

Dated: 11-24-03  
Dorsey & Whitney LLP  
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\_\_\_\_\_  
Jennifer M. Lane, Reg. No. 51,916 for  
Robin M. Silva, Reg. No. 38,304

Customer Number: 32940

Attachments:

Form PTO/SB/8A-B, Substitute for form PTO 1449  
Twenty-nine (29) References

DEC 03 2003

Substitute PTO/SB/8A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449A/PTO (Modified)  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	09/295,691	
			Filing Date	April 21, 1999	
			First Named Inventor	Kayyem	
			Group Art Unit	1753	
			Examiner Name	Starsiak, John S.	
Sheet	1	of	2	Attorney Docket Number	A-67465/RFT/

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.	U.S. Patent Document Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	5,064,618	11-12-1991	Baker et al.	
	A2	5,192,507	03-09-1993	Taylor et al.	
	A3	5,505,321	04-09-1996	Caron et al.	
	A4	5,519,635	05-21-1996	Miyake et al.	
	A5	5,694,932	12-09-1997	Michel	
	A6	5,727,548	03-17-1998	Hill et al.	
	A7	5,728,532	03-17-1998	Ackley	
	A8	5,741,462	04-21-1998	Nova et al.	
	A9	6,090,933	07-18-2000	Kayyem et al.	
	A10	6,096,273	08-01-2000	Kayyem et al.	
	A11	6,100,045	08-08-2000	Van Es	
	A12	6,114,122	09-05-2000	Besemer et al.	
	A13	6,232,062	05-15-2001	Kayyem et al.	
	A14	6,258,593	07-10-2001	Schembri et al.	
	A15	6,264,825	07-24-2001	Blackburn et al.	
	A16	6,290,839	09-18-2001	Kayyem et al.	
	A17	6,326,211	12-04-2001	Anderson et al.	
	A18	6,541,617	04-01-2003	Bamdad et al.	
	A19	6,600,026	07-29-2003	Yu	
	A20				
	A21				

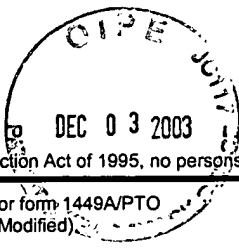
FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.	Foreign Patent Document Country Code <sup>2</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
	B1	WO 00/62931	10-26-2000	Clinical Micro Sensors Inc.		
	B2	WO 99/33559	07-08-1999	Cepheid		
	B3	WO 98/05424	02-12-1998	Caliper Technologies Corp		
	B4	WO 99/67425	12-29-1999	Clinical Micro Sensors Inc.		
	B5	WO 01/35100	05-17-2001	Clinical Micro Sensors Inc.		
	B6	WO 01/54813	08-02-2001	Clinical Micro Sensors Inc.		
	B7	WO 02/43864	06-06-2002	Clinical Micro Sensors Inc.		

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English Language Translation is attached.

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			First Named Inventor	Kayy m	
			Group Art Unit	1753	
			Examiner Name	Starsiak, John S.	
Sheet	2	of	2	Attorney Docket Number	A-67465/RFT/

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	C1	DONTHA et al., "Generation of Biotin/Avidin/Enzyme Nanostructures with Maskless Photolithography," <i>Anal. Chem.</i> , 1997, 69:2619-2625.	
	C2	LIU et al., "Passive Mixing in a Three-Dimensional Serpentine Microchannel," <i>Journal of Microelectromechanical Systems</i> , 2000, 9(2):190-196.	
	C3		
	C4		
	C5		

Examiner Signature		Date Considered	
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